

<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/787,106	KIM, KUN YUL	
	Examiner	Art Unit	
	Christopher R. Lamb	2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date <u>9/22/05; 6/14/06</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                           | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Allowable Subject Matter***

2. Claims 1-9 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Regarding claim 1:

A comparison between the claim and the closest prior art of record, McDonald et al. (US 6,563,779), is as follows:

<b>Claim 1:</b>	<b>McDonald:</b>
A holographic apparatus comprising:	Fig. 4B
a transferring unit for receiving an incident laser beam including data read from a plurality of tracks on a holographic medium to produce a focused laser beam;	Fig. 4B: parts 72-86, but it only reads from one track
a tracking servo unit for receiving a first portion of the focused laser beam through a plurality of pinholes and,	Fig. 5A, but there is only one pinhole (104)
at the same time, reflecting a second portion of the focused laser beam back to the transferring unit through a reflecting	Not present

section,	
wherein the tracking servo unit moves the transferring unit or the pinholes to adjust the amount of the first portion of the focused laser beam to thereby retrieve data from a target track among the plurality of tracks, and	column 7, lines 50-65: but McDonald repositions the light beam, not the receiving unit or pinholes
wherein the second portion of the focused laser beam reflected back to the transferring unit is converted into a return laser beam by the transferring unit; and	Not present
a focusing servo unit for focusing the return laser beam and then checking a focused image of the return laser beam to compensate for vertical movements of the holographic medium.	McDonald does disclose a focusing servo unit (Fig. 4B: 88), but it does not operate on a return laser beam

In short, McDonald discloses a tracking system for reading holographic media utilizing a pinhole, but does not disclose many specific elements of the claim. Some of these missing pieces may be disclosed in the other prior art of record or well known in the art, but the combination of elements renders the claim allowable over the prior art of record.

Regarding claims 2-7:

They are allowable due to their dependence on claim 1.

Regarding claim 8:

This claim contains many of the same elements as claim 1, and is likewise allowable.

Regarding claim 9:

This claim is slightly broader than the previous claims, but it still requires multiple pinholes and that the pinhole reflect part of the beam backwards to a focusing system. These elements in combination with the other elements of the claim render it allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Amble et al. (US 6,574,174) discloses multiple pinholes for tracking and focusing, but not with regards to holographic media; McLeod et al. (US 6,111,828) discloses multiple pinholes for reading holographic media, but for focusing rather than tracking control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (572)

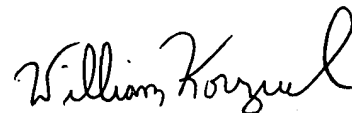
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272-5264. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRL 11/2/06



**WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**